Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20544

In the Matter of:	
Structure and Practices of the Video Relay Service Program	CG Docket No. 10-51
Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities	CG Docket No. 03-123

REPLY COMMENTS OF SORENSON COMMUNICATIONS, LLC REGARDING PART III AND SECTIONS IV.C-E AND G-H OF THE FURTHER NOTICE OF PROPOSED RULEMAKING

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Sorenson Communications, LLC ("Sorenson") hereby submits reply comments with respect to Part III and Sections IV.C-E and G-H of the Further Notice of Proposed Rulemaking regarding Video Relay Services ("VRS").[1]

SUMMARY AND INTRODUCTION

There is no basis in the record for imposing any restrictions on the use of reasonable noncompete agreements. Such provisions are governed by state law, and Sorenson complies with all applicable state laws. As a threshold matter, the Commission does not have the authority under Section 225 to limit these agreements, and there is no analysis in the record to the contrary. Moreover, the Commission should not entertain ZVRS' suggestion that the Commission can proscribe contractual provisions that require employees to remain loyal to their employer *while employed*—even states that prohibit post-employment noncompete agreements agree that an employer can prohibit current employees from working for competitors.

Regarding "phony" VRS calls, the Commission should reject GlobalVRS's proposal to deputize VRS providers to ferret out and report to the Commission suspected cases of "subversive activity," possible cases of "domestic violence," and "behavior of a threatening nature toward an individual or the public."[2] Requiring providers to monitor and report call

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1 *Structure and Practices of the Video Relay Service Program; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Report and Order, Notice of Inquiry, Further Notice of Proposed Rulemaking, and Order, 32 FCC Rcd. 2436, 2017 WL 1167513 (rel. Mar. 23, 2017) ("*NOI*" or "*FNPRM*").

2 Comments of ASL Services Holdings, LLC dba GlobalVRS to Notice of Inquiry on Service Quality Metrics for VRS, Part III and Further Notice of Proposed Rulemaking, Sections

content to the Commission violates basic principles of functional equivalence, is squarely prohibited by Section 225, and would be bad policy. Indeed, doing so potentially chills speech as deaf consumers using VRS may be concerned about having intimate or personal discussions if they know that interpreters are able—or even required—to report call content to the Commission, law enforcement, or other governmental agencies. Moreover, as Sorenson has previously explained, interpreters have no context when they interpret a call; unless explicitly told by a caller that there is an emergency (in which case VIs can initiate a 911 call), Video Interpreters ("VIs") generally are not in a position to know—based on a few minutes of conversation without any context—whether a caller is an actual victim of domestic violence or whether callers are actually plotting a crime. Sorenson of course provides law enforcement access to communications in response to lawful requests, just as a telephone company would, but Sorenson and its VIs, like telephone companies, should not be required to monitor call content in the absence of a warrant or other lawfully executed compulsory legal process. As Sorenson has explained in its comments, the Commission should therefore clarify that providers must act as the functional equivalent of a dial tone and should not terminate calls or disclose call content regardless of whether the interpreter rightly or wrongly believes that the call might be improper or even criminal.

With regard to specific metrics, commenters agree that measuring the accuracy of VRS interpretation is, to say the least, a challenging problem.[3] Further, there is a difference between attempting to measure the quality and accuracy of an individual interpreter for hiring, retention,

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IV.C–E and G–H at 7, CG Docket Nos. 10-51 & 03-123 (filed May 30, 2017) ("GlobalVRS Comments").

[3] *See, e.g.*, Marty M. Taylor, PhD, *Report Provided to Chris Wakeland at Sorenson Communications, Inc. in Response to FCC Questions on Metrics for VRS Interpreting, NOI, Dated March 23, 2017* at 5-7 (June 16, 2017) ("Taylor Report"), attached as Exhibit A.

and training, and the even more daunting task of measuring the quality of each provider's VRS. While developing methods to gather data assessing the quality of individual interpreters is an important step, the Commission would separately need to develop methods to weigh that data—along with other metrics such as video quality and speed of answer—to assess the overall performance and quality of each VRS provider. The Commission should consider whether additional regulation through data collection would be a net benefit (i.e., with benefits outweighing costs)—since consumers currently drive service improvements in the VRS marketplace by selecting the provider they prefer (both through default selection and, on a call-by-call basis, through dial-around), and any additional costs of compliance would be borne by the TRS Fund. In adopting any performance measures, the Commission should consider the extent to which the information will assist users in choosing among providers, balanced against the costs imposed by such a data collection.

Sorenson supports the Commission's efforts to evaluate the performance of all its Telecommunications Relay Services ("TRS"), including VRS. In doing so, the Commission should evaluate the extent to which it is fulfilling all of the statute's directives—ensuring that "functionally equivalent" communications services are "available" to deaf Americans "to the extent possible and in the most efficient manner." In striving to achieve these statutory mandates, Sorenson reiterates that the Commission should keep in mind that there is a relationship between performance metrics and cost, and that its dominant aim with regard to performance metrics must be to ensure that functionally equivalent communications services are available to the extent possible to deaf and hard-of-hearing individuals.

Finally, the Commission should ensure providers are able to continue providing service-related equipment to customers. If the Commission does decide to prohibit non-service-related

inducements, it should create an exception for gifts of *de minimis* value. Whatever approach the Commission takes, it should establish a clear policy that puts providers on notice of what kinds of gifts are unacceptable inducements.

ARGUMENT

I. THE COMMISSION DOES NOT HAVE STATUTORY AUTHORITY TO LIMIT REASONABLE NONCOMPETE CLAUSES.

Sorenson dedicates significant resources to ensure it has the highest quality VIs, including the substantial training to ensure that interpreters can handle the varied tasks of a VI documented by noted interpreting expert Dr. Marty Taylor.[4] Sorenson strives to hire the best interpreters and, given the significant training Sorenson provides, it is unsurprising that other VRS providers are interested in hiring them. And nothing prevents them from doing so, provided the employment is in a different state or six months have passed since the end of a VI's employment with Sorenson.

The other VRS providers now urge the Commission to effectively abrogate private contracts and override these free market protections governed by state law; indeed, some commenters go as far as to suggest that Sorenson VIs should be able to work for other providers while simultaneously working for Sorenson. The record does not support this result. No commenter has explained the Commission's legal authority to do so, nor has anyone provided any evidence that provides an economic justification for limiting noncompete clauses. It is arbitrary and capricious to make policy without evidence and a reasoned tie between the evidence and the action to be taken, and there is no reason for the Commission to do so here.

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[4] *See* Taylor Report.

A. The Commission Lacks Legal Authority to Regulate Noncompete Clauses.

Tellingly, no other commenter addressed whether the Commission has the legal authority to regulate noncompete clauses. A few commenters asserted, without explanation, that Section 225 allows the Commission to regulate noncompete clauses. But these commenters ignored the fact that the Commission has used that clause only to regulate the operational aspects of VRS in order to assure functional equivalency.[5] There is no evidence that noncompete clauses have prevented any VRS consumer from receiving functionally equivalent service. The unsubstantiated and stale anecdotes from other providers do not demonstrate that noncompete clauses inhibit consumers from receiving quality VRS. Without proof that prohibiting noncompete clauses would promote functional equivalency, the Commission cannot preempt state employment and contract law to regulate noncompete clauses.[6]

B. It Is Entirely Common and Appropriate to Restrict Concurrent Employment with a Competitor in the Same Industry.

As Sorenson observed in its comments, while the *FNPRM* does not appear to ask about clauses that apply during employment, ZVRS urges the Commission to prohibit them anyway.

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[5] *See* Comments of Sorenson Communications, LLC Regarding Part III and Sections IV.C-E and G-H of the Further Notice of Proposed Rulemaking at 38, CG Docket Nos. 10-51 & 03-123 (filed May 30, 2017) ("Sorenson Comments").

[6] To preempt state law, not only would the Commission need to find a source of statutory authority for its actions, but it would also have to find that state law conflicted with or thwarted federal objectives. To preempt state law, the Commission would need to find a clear statement of statutory authority for its actions, and it would likely be arbitrary and capricious for it to preempt a law that does not conflict with or thwart federal objectives. *Compare Minn. Pub. Utils. Comm'n v. FCC*, 483 F.3d 570 (8th Cir. 2007) (affirming FCC decision preempting state law that conflicted with uniform national 911 VoIP regulations), *with Tennessee v. FCC*, 832 F.3d 597 (6th Cir. 2016) (reversing FCC decision to preempt state laws where there was no clear statement of statutory preemption authority, and noting that preempted state law did not conflict with FCC rules). Nothing in the record provides a basis for such a finding here.

At the outset, Sorenson notes that this rulemaking is not the proper forum to address ZVRS' request, because the Commission must first put the relevant parties on notice of any proposed new rules.[7] But even if the Commission had provided notice of such a proposal, Sorenson reiterates that it would be wholly inappropriate for the Commission to prohibit VRS providers from requiring employees to abide by their fiduciary duty of loyalty *during employment*. Indeed, it is uncontroversial that current employees owe a duty of loyalty to their employers, and thus a contractual provision that prohibits an employee from working simultaneously for two competing VRS providers is imminently reasonable.

Notably, while Sorenson prohibits its employees from concurrently working for a competing VRS provider, it permits them to work concurrently in community interpreting.[8] This is a reasonable distinction. Interpreters have access to Sorenson's proprietary information, including customer names and telephone numbers and parties that customers call, access to which would confer an unfair competitive advantage on a competing VRS provider.[9] By contrast, community interpreting is less likely to involve VRS-specific technology and training,[10]

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7 *See* 5 U.S.C. § 553.

8 *See* Reply Comments of Sorenson Communications, LLC, Regarding Section IV.A-B and F of the Further Notice of Proposed Rulemaking at 29, CG Docket Nos. 03-123 & 10-51 (filed May 4, 2017) (citing Declaration of Christopher Wakeland ¶ 11, attached as Exhibit 3).

9 Sorenson VIs learn Sorenson's policies and procedures, including for handling 911 calls; they learn how to reach Sorenson customer service; they have access to Sorenson's customer list and see customers face-to-face in each call; and they frequently handle confidential customer information. If they were allowed to work for competitors at the same time, they would be able to share Sorenson policies, trade secrets, customer lists, and confidential customer information with other providers.

10 It is also reasonable for Sorenson to prevent VIs from being exposed to different, and potentially conflicting, sets of provider-specific policies, which result in confusion and diminish service quality for deaf consumers, or even lead to diminished ability to handle emergency calls.

or to implicate misuse of Sorenson customer data. On balance, where no proprietary intellectual property or duty of loyalty exists, it is in the public interest to allow VIs to serve in schools, hospitals, courts, and other public forums to assist the deaf community. Only in the limited context of interpreting for a competing VRS provider is it necessary to prevent VIs from simultaneously working for Sorenson's competitors, which would result in serious competitive harm to Sorenson, to the detriment of its callers.

Nevertheless, ZVRS appears to argue that the Commission should proscribe such contractual loyalty requirements, and cites, among other things, California as an example of a state that prohibits the use of noncompete agreements.[11] But ZVRS fails to note that even California does not prohibit restrictions on current employees. As the California Court of Appeal set forth in *Angelica Textile Services, Inc. v. Park*:

> Business and Professions Code section 16600 states: "Except as provided in this chapter, every contract by which anyone is restrained from engaging in a lawful profession, trade, or business of any kind is to that extent void." . . . However, the statute does not affect limitations on an employee's conduct or duties while employed. "While California law does permit an employee to seek other employment and even to make some 'preparations to compete' before resigning, California law does not authorize an employee to transfer his loyalty to a competitor. *During the term of employment, an employer is entitled to its employees' undivided loyalty.*[12]

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[11] *See* Comments of ZVRS Holding Company, ZVRS and Purple Communications on Notice of Inquiry and Further Notice of Proposed Rulemaking Sections IV.C-E and G-H at 7-8, CG Docket Nos. 10-51 & 03-123 (filed May 30, 2017) ("ZVRS Comments") (arguing that Sorenson VIs who could not work full schedules should have been allowed to work for other VRS providers). The fact that ZVRS and Purple are closing call centers in areas where Sorenson does not even operate shows that they cannot need noncompete clauses to stay competitive.

[12] *Angelica Textile Servs., Inc. v. Park*, 163 Cal. Rptr. 3d 192, 204 (2013) (emphasis added) (quoting *Fowler v. Varian*, 241 Cal. Rptr. 539, 543 (1987)), *modified* (Oct. 29, 2013), *modified on denial of reh'g* (Nov. 7, 2013); *see also Youngevity Int'l, Corp. v. Smith*, No. 3:16-cv-00704-L-JLB, 2016 WL 7626584, at *6 (S.D. Cal. Dec. 1, 2016), *modified on reconsideration*, No. 3:16-cv-00704-L-JLB, 2016 WL 7626585 (S.D. Cal. Dec. 9, 2016)

Virginia[13] and Illinois[14] courts, among others, have similarly found that an employer can restrict its current employees' ability to compete, and with good reason. It would be wild overreach for the Commission to attempt to restrict current employment noncompete clauses, including preempting state laws that make such clauses permissible. In any event, these state laws show that this balance of employee and employer interests is much more appropriately addressed by state employment laws of general applicability than by a VRS-specific, preemptive rule.

C. Prohibiting Post-Employment Noncompete Clauses Would Harm the Public Interest.

Reasonable post-employment noncompete clauses, like Sorenson's, allow businesses to extensively train their employees and improve their services, as well as protect proprietary information and customer privacy.[15] Without the protection offered by noncompete clauses,

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("Defendants reading of § 16600 is overbroad. The California Court of Appeal has stated that § 16600 does not apply to restrictions on a person's ability to engage in a lawful business while that person is employed by the company to which he or she promised loyalty. Rather, § 16600 targets restrictions on *post*-employment activity." (citation omitted)).

[13] *See Williams v. Dominion Tech. Partners, L.L.C.*, 576 S.E.2d 752, 757 (Va. 2003) ("We have long recognized that under the common law an employee, including an employee-at-will, owes a fiduciary duty of loyalty to his employer during his employment. Subsumed within this general duty of loyalty is the more specific duty that the employee not compete with his employer during his employment." (citation omitted)).

[14] *See Cross Wood Prods., Inc. v. Suter*, 422 N.E.2d 953, 957 (Ill. App. Ct. 1981) ("[T]he employee may not go beyond such preliminary competitive activities and commence business as a rival concern while still employed. To do so is a breach of the employee's common law fiduciary duty of loyalty to his employer, and gives rise to a cause of action, the remedies for which could include entry of an injunction restraining such competition.").

[15] Indeed, both District of Columbia and Utah courts recognize that an employer's protectable interests can support the enforcement of restrictive covenants. *See, e.g.*, *Sys. Concepts, Inc. v. Dixon*, 669 P.2d 421, 426 (Utah 1983) (recognizing that employers are entitled to the good will created by their employees, that "a covenant is valid which protects good will as well as trade secrets," and that restrictive covenants under the circumstances of that case were "a necessary and proper vehicle for the protection of [the company's] good will" (quoting *Allen v. Rose Park Pharmacy*, 237 P.2d 823, 827 (Utah 1951))); *Sys. W. Performance v. Farland*, No. 2:14-cv-00276-DN-BCW, 2015 WL 4920962 (D. Utah Aug. 18, 2015) (noting that

competitors would be able to free ride off these substantial investments. The same is true in the VRS industry. Should it attempt to prohibit noncompete clauses, the Commission would allow Sorenson's competitors to reap the benefits of Sorenson's training and confidential information, without paying anything for it. Moreover, the Commission would be abrogating privately negotiated contracts that serve an important purpose protecting Sorenson's interests, ensuring high-quality service for customers, and protecting customer privacy.

There can be no doubt that VRS interpreting differs significantly from community interpreting. In her paper, Dr. Taylor summarizes the differences as follows:

TRADITIONAL INTERPRETING	VRS INTERPRETING[16]
Face-to-face communication	No in-person contact
Three-dimensional perspective	Two-dimensional perspective dependent on high speed compression with times when the quality decays
No physical limitation on signing space	Restricted signing space due to technology
Uses contextual and environmental cues for making meaning	Context/environment to support cues are lacking
Relationship between parties is commonly known (e.g., doctor/patient, employer/employee)	Relationships between callers are often unknown
Sociolinguistic factors (gender, age, ethnicity) are overt	Sociolinguistic factors are not always known
Assignments are made in advance	"Immediate" assignments

"[c]ovenants not to compete are enforceable if carefully drawn to protect only the legitimate interests of the employer" and that Utah courts will enforce such covenants "where they are necessary for the protection of the business for the benefit of which the covenant was made" (quoting *Robbins v. Finlay*, 645 P.2d 623, 627 (Utah 1982) and *Allen v. Rose Park*, 237 P.2d at 826)); *Morgan Stanley DWC Inc. v. Rothe*, 150 F. Supp. 2d 67, 74 (D.D.C. 2001) (finding that restrictive covenants "designed to prevent potentially harmful interference with [company's] crucial client base" were "fair-minded"); *Mercer Mgmt. Consulting, Inc. v. Wilde*, 920 F. Supp. 219, 237 (D.D.C. 1996) (noting that a company's wish to "protect the investment it made in its employees, preserve the confidentiality of information gleaned in the course of employment at [the company], and protect itself from its employees leaving and capitalizing on [the company's] client base" are "legitimate" reasons for a restrictive covenant).

16 *See* Taylor Report at 5-6.

Ability to accept or turn down assignments (e.g., legal or medical interpreting)	Must accept all calls regardless of content or caller (e.g., young children, new immigrant with limited signing abilities, computer techie)
Potential for extensive preparation	Relies on prior experiences rather than preparation
Generally works alone or with one other interpreter	Team environment
Often self-employed	Works for a corporation
Interpretation is the only role	Multiple roles occurring simultaneously (e.g., operator, customer service representative)
One locale with a relatively limited and predictable number of deaf and hard-of-hearing consumers (e.g., number of "jobs" in a day often range from one to five)	Wide variety of callers and content (e.g., number of calls in a day can be more than 100)
Often regional signs are known	Often regional signs are not known
Consumers see each other and are able to monitor reactions visually and auditorily	Callers are not able to see or hear each other or monitor reactions
No special need for technology competence	Technology competence is a necessary skill
Dual-tasking at linguistic and physical levels	Multi-tasking at linguistic, physical, and mechanical levels
Generally greater demand for English to ASL interpreting	Greater demand for ASL to English interpretation
Most consumers are experienced using interpreters	Many inexperienced callers placing phone calls
Very little use of intimate register	High number of calls requiring the use of intimate register

Given these substantial differences between community interpreting and interpreting for VRS, an FCC rule to prohibit *per se* post-employment noncompete agreements would only harm consumers. In order to help interpreters trained for community interpreting to adapt to the significantly different demands of VRS, Sorenson expends significant resources training its VIs on the processes, procedures, and technology that Sorenson has developed in order to make it easier for VIs to perform their essential function, and to help VIs address stressful situations, including emergency calls, that arise in VRS. While it is true that all VRS providers must provide at least minimal training to VIs,[17] Sorenson has its own methods for training VIs that it

[17] *See* GlobalVRS Comments at 13.

believes lead to its industry-leading service. That quality of Sorenson's training is precisely the reason that other VRS providers aggressively seek to hire away Sorenson's VIs.

But if the Commission restricted noncompete clauses, Sorenson could be deterred over time from making systemic improvements that could reveal its trade secrets or customer information to VIs, which could ultimately degrade the quality of Sorenson's service. Without noncompete clauses, VIs could leave to work for a different VRS provider at any time, including immediately after being trained by Sorenson. This would effectively force Sorenson to subsidize other VRS providers without any benefit to Sorenson's customers. Additionally, Sorenson invests in developing ways to improve its service, and noncompete clauses provide additional assurance that new methods and products will not be exposed to competitors. Furthermore, as discussed with respect to contemporaneous employment by two VRS providers, a VI is exposed to confidential customer information as to customer names, addresses, telephone numbers, and at least the call destination handled by that VI.[18] Providing a reasonable period between employment by two different VRS providers creates more of a fire break against transferring customer data from one provider to another.

To be sure, not all noncompete clauses benefit consumers. Overly broad clauses could limit the labor pool of VIs to the detriment of consumers. That is why Sorenson's clause lasts only six months and bars employment only with another VRS provider in the same state during that six-month period. Sorenson's narrow noncompete provision is governed by and consistent with state law, which has long nullified clauses that have anticompetitive effects.

Unsurprisingly, no other commenter has offered any data or economic analysis showing

[18] *See* Section I.B., *supra.*

that noncompete clauses have prevented other VRS providers from meeting consumer demand.[19] At most, commenters have offered vague stories from four years ago regarding their supposed inability to hire one or two VIs due to noncompete clauses.[20] This thin anecdotal evidence is not a basis on which the Commission can meaningfully regulate, and certainly provides no reasonable basis for setting aside the generally applicable state laws related to noncompete agreements.

Given the lack of evidence showing that noncompete clauses for VIs have anticompetitive effects, the Commission should reject other commenters' proposals to limit these clauses. While Sorenson firmly believes that the Commission should not restrict noncompete clauses in any manner, Sorenson is particularly concerned about proposals to force providers to allow their VIs to simultaneously work for other providers. That rule would effectively give VIs a right to violate their fiduciary duty of loyalty to their employers. Because of this concern, courts have held that "an in-term covenant can generally support a relatively broad restriction," and some have suggested such clauses need not even pass a reasonableness test.[21] The Commission should avoid adopting a rule that undermines an essential part of employer-employee relationships.

In light of these concerns, the Commission should not limit reasonable noncompete clauses. As Sorenson noted in its opening comments, state law will continue to apply to VRS contracts and render overly broad clauses unenforceable against any VI. The Commission

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19 *See* Comments of Convo Communications at 17, CG Docket Nos. 10-51 & 03-123 (filed May 30, 2017) ("Convo Comments"); ZVRS Comments at 7.

20 *See* ZVRS Comments at 8.

21 DONALD J. ASPELUND & JOAN E. BECKNER, EMPLOYEE NONCOMPETITION LAW § 6:58 (Sept. 2016).

should continue leaving this issue to the states, rather than entering a new area of regulation and allowing VRS providers to benefit from others' investments. A rule that allows this would run contrary to good economic sense and would do far more harm than good.

D. The Commission's Limitation on Exclusive Contracts Between MDUs and MVPDs Does Not Support Restrictions on Reasonable VI Noncompete Clauses.

ZVRS argues that the reasoning behind the Commission's restrictions against exclusive contracts between Multiple Dwelling Units ("MDUs") and Multichannel Video Programming Distributors ("MVPDs") would support limiting noncompete agreements in VRS. But these scenarios differ significantly. First, as the Commission noted with regard to MDUs, "[e]xclusivity clauses that run in favor of cable operators typically are a complete bar to entry,"[22] which is certainly not true with regard to noncompete agreements for VRS VIs—nothing about a limited-scope noncompete agreement serves as a complete bar to entry for another VRS provider. Next, the Commission observed that:

> By far the greatest harm that exclusivity clauses cause residents of MDUs is that they deny those residents another choice of MVPD service and thus deny them the benefits of increased competition. . . . This is particularly true when incumbent cable operators and MDU owners sign contracts before a competitive provider enters the market, a practice that the record in this proceeding indicates is quite common. Within the MDU, the incumbent, protected by its exclusivity clause from any competition it may face outside the MDU's boundaries, would have no incentive to hold down its prices within the MDU. The MDU's residents would also be denied the benefits of taking service from the new entrant, with potentially lower rates and better features than the incumbent's.[23]

None of these concerns are present in VRS. Reasonable VI noncompete agreements (which, to be operative, are otherwise permissible under applicable state law) have no effect at all on VRS

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[22] *Exclusive Service Contracts for Provision of Video Services in Multiple Dwelling Units and Other Real Estate Developments*, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd. 20,235, 20,240 ¶ 9 (2007).

[23] *Id.* ¶ 17.

consumers, who are not subject to any kind of exclusivity agreement, and certainly do not deny VRS consumers a choice of providers. And unlike in the MDU context, reasonable VI noncompete agreements do not operate to raise costs paid by VRS consumers. While at first glance the language quoted by ZVRS would appear to support the Commission's ability to limit VI noncompete agreements, applying that reasoning in VRS would be arbitrary and capricious given the lack of similar record evidence.

II. THE COMMISSION SHOULD CONFIRM THAT PROVIDERS MAY BLOCK CALLERS WHO REPEATEDLY HARASS INTERPRETERS AND SHOULD CONFIRM THAT INTERPRETERS ARE NOT GOVERNMENT-APPOINTED CENSORS.

Regarding "scam calls," the comments confirm that a small number of users place video calls for the purpose of harassing interpreters.[24] As ZVRS correctly notes, these calls are not TRS calls, and providers should (and currently do) have the right to terminate them.[25] Nevertheless, sometimes terminating the call and warning the perpetrator does not solve the problem. As GlobalVRS notes, a single harassing caller can wreak havoc by placing repeated abusive calls that consume provider resources and create an "'intolerable affront'" to VIs.[26] When that happens, providers need the flexibility to block the caller—including by blocking calls from the caller's IP address and preventing callers from circumventing call restrictions by placing dial-around calls from another provider.[27]

The Consumer Groups correctly note that if an individual repeatedly places abusive calls,

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[24] *See* GlobalVRS Comments at 6; Convo Comments at 9-10.

[25] *See* ZVRS Comments at 14; *see also* Convo Comments at 10 (noting that it terminates such calls).

[26] *See* GlobalVRS Comments at 6-7.

[27] *See id.* at 7.

it is appropriate to deny that individual service. But they suggest that service should be denied "on a call-by-call basis" rather than through a "temporary or permanent moratorium" because a moratorium could prevent the individual from placing emergency calls.[28] Sorenson appreciates the severity of blocking a caller. Nevertheless, permitting serial abusers to place emergency calls does not address the problem. In the past, some of the worst abuse experienced by interpreters has come from a caller who dialed 911 solely for the purpose of subjecting the interpreter to obscene images.

Moreover, permitting VRS providers to block serial abusers—including for emergency calls—is consistent with the way the Commission has treated abusive wireless 911 callers. As with VRS, hearing callers sometimes place fraudulent or abusive calls to 911 from non-service-initiated ("NSI") phones. In that context, it is the public safety answering point ("PSAP")—rather than a VRS interpreter—that is the victim of the abuse, and the Commission permits wireless providers to refuse 911 calls from an NSI phone at the request of the PSAP.[29] (Moreover, the Commission has proposed to sunset the requirement to handle *any* 911 calls from an NSI phone.[30])

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[28] Comments of Consumer Groups on Notice of Inquiry and Further Notice of Proposed Rulemaking at 5, CG Docket No. 10-51 & 03-123 (filed May 30, 2017) ("Consumer Groups Comments").

[29] *FCC Clarifies That 911 Call-Forwarding Rule Does Not Preclude Wireless Carriers from Blocking Fraudulent 911 Calls from Non-Service Initialized Phones Pursuant to State and Local Law*, Public Notice, 17 FCC Rcd. 21,877, 21,878 (2002) (A wireless provider may block 911 calls from a particular handset when "a PSAP has identified a handset that is transmitting fraudulent 911 calls and makes a request to a wireless carrier to block 911 calls from that handset in accordance with applicable state and local law enforcement procedures.").

[30] *See 911 Call-Forwarding Requirements for Non-Service-Initialized Phones*, Notice of Proposed Rulemaking, 30 FCC Rcd. 3449, 3450 ¶ 2 (2015).

The Consumer Groups are nevertheless correct that the Commission must "narrowly define harassing and other 'phony calls' . . . while maintaining the call confidentiality rule."[31] In adopting the Americans with Disabilities Act ("ADA"), Congress directed the Commission to adopt regulations that "prohibit relay operators from disclosing the content of any relayed conversation."[32] This prohibition was necessary because hearing people do not have government censors monitoring their every call to determine whether the content might be criminal or whether it might put the caller in danger.

For this reason, the Commission must reject GlobalVRS's proposal to deputize VRS providers to ferret out and report to the Commission suspected cases of "subversive activity," possible cases of "domestic violence," and "behavior of a threatening nature toward an individual or the public."[33] Requiring providers to monitor and report call content to the Commission violates basic principles of functional equivalence, and it is squarely prohibited by Section 225.[34] Moreover, such a requirement would be bad policy. Deaf individuals will think hard before having intimate or frank discussions over VRS if they know that interpreters are required—or even able—to report call content to the Commission. Moreover, as Sorenson has previously pointed out, interpreters have no context when they interpret a call; they generally are not in a position to know—based on a few minutes of conversation without any context—whether a caller is an actual victim of domestic violence or whether callers are actually plotting a crime. Nor is it possible for VIs to be familiar with the laws in every state in order to determine whether a call is criminal; this is especially true since VIs do not always know the location of

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31 Consumer Groups Comments at 5.

32 47 U.S.C. § 225(d)(1)(F).

33 GlobalVRS Comments at 7.

34 *See* 47 U.S.C. § 225(d)(1)(F).

each caller and Sorenson distributes VRS calls to any of its call centers around the country, without any tie to the location of the VRS user or the hearing party to the call. As Sorenson has explained in its comments, the Commission should therefore clarify that providers must act as the functional equivalent of a dial tone, providing service to anyone who picks up the phone, and that the important role VIs play should not include terminating calls or disclosing call content regardless of whether the interpreter believes that the call might be illegal.

III. THE COMMISSION'S FOCUS WITH REGARD TO PERFORMANCE METRICS MUST BE TO ENSURE THAT FUNCTIONALLY EQUIVALENT COMMUNICATIONS SERVICES ARE AVAILABLE TO THE EXTENT POSSIBLE TO DEAF AND HARD-OF-HEARING INDIVIDUALS.

Sorenson supports the Commission's efforts to evaluate the performance of VRS. In doing so, the Commission should evaluate the extent to which it is fulfilling all of the statute's directives—ensuring that "functionally equivalent" communications services are "available" to deaf Americans "to the extent possible and in the most efficient manner." Sorenson reiterates that functional equivalent service means, as the Consumer Groups have correctly emphasized, that persons receiving or making relay calls must be "able to participate equally in the entire conversation . . . as if the call is between individuals who are not using relay service."[35] Furthermore, Sorenson agrees with the Consumer Groups that Section 225 mandates that the Commission must ensure the provision of functionally equivalent VRS in a way that does not "discourage or impair the development of improved technology," and indeed believes the

[35] Consumer Groups' TRS Policy Statement at 1, attached to Letter of Tamar Finn and Brett Ferenchak, Counsel to TDI, to Marlene H. Dortch, Secretary, FCC, CG Docket Nos. 03-123 & 10-51 (filed Apr. 12, 2011).

Commission should actively encourage and promote, through rate-setting and otherwise, the development of new technologies.

In striving to achieve these statutory mandates, Sorenson reiterates that the Commission should keep in mind that there is a relationship between performance metrics and cost. Indeed, improvements to the functional equivalence of VRS will almost certainly increase the cost of providing VRS, which will impact the TRS Fund. Sorenson here reiterates the points made in Professor Bagenstos' White Paper, submitted along with Sorenson's initial comments, that the Commission's dominant aim must be to ensure that functionally equivalent communications services are available to the extent possible to deaf and hard-of-hearing individuals:

> Title IV of the ADA defines 'telecommunications relay services' as those services that provide disabled individuals 'functionally equivalent' opportunities to communicate as are provided to nondisabled individuals. By the plain text of the statute, the Commission's dominant consideration must be to ensure that individuals with speech and hearing impairments have equal access to telecommunication. By using the language 'to the extent possible,' Congress made clear that the Commission may not rely on considerations of cost to deny relay services to individuals who need them for equal access.
>
> To be sure, the Commission must ensure that the services are provided 'in the most efficient manner.' Accordingly, when there are two alternative means of providing relay services that are functionally equivalent to each other, the Commission may require that a user receive the less expensive of the two alternatives. And the Commission may adopt rules that are tailored to ensure that relay services are used only by those who in fact need them for equal access to communication.
>
> But the Commission's March 23 Notice of Inquiry suggests a broader interpretation of the 'most efficient manner' language—one that is inconsistent with the text and structure of the ADA. For one thing, the Notice describes the statutory requirement as one of providing services 'in the most efficient and cost-effective manner'—even though the term 'cost-effective' does not appear in Title IV. Two paragraphs later, the Notice refers to Title IV as a 'cost-effective provision.' . . .
>
> Under the plain text of Title IV, the Commission's dominant aim must be to ensure that functionally equivalent communications services are available to the extent possible to deaf and hard-of-hearing individuals. It is when there are

> multiple ways of achieving functional equivalence that the Commission may choose the less expensive means.[36]

Professor Bagenstos further explains:

> Title IV of the ADA is a very different sort of statutory provision than others that the Commission administers. Those other provisions, such as the Communications Act's universal-service provision, are classic public-interest regulatory delegations, which empower the Commission to balance a broad array of factors in making its decisions. The universal-service provision, notably, allows the Commission to consider consumer costs and adopt rules that limit use of the programs it covers to serve fiscal and administrative interests. Title IV, like other civil rights statutes, protects individuals. Like other provisions of the ADA, it requires accommodations that are necessary to provide disabled persons equal access to opportunities. And, unlike the universal-service provision, it does not permit the Commission to deny equal access to eligible individuals based on considerations of cost or administrative convenience.[37]

IV. COMMENTERS AGREE THAT MEASURING VRS PERFORMANCE, AND IN PARTICULAR INTERPRETATION QUALITY, POSES A UNIQUE CHALLENGE.

Commenters are in broad agreement that measuring the accuracy of VRS interpretation is, to say the least, a challenging problem. As Sorenson explained in its initial comments, VRS interpreting is unique and demanding. Often, community interpreting for deaf individuals involves interpreting in only one direction—for example, interpreting speeches, classes, or other presentations from English to ASL so that deaf individuals can understand a hearing speaker. VRS interpreting, in contrast, requires interpreting *both* sides of a conversation.[38] And VRS is more difficult and complex than even most bidirectional interpreting because it requires

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[36] Samuel R. Bagenstos, *The Proper Interpretation of "In the Most Efficient Manner" in Title IV of the Americans with Disabilities Act*, at 1-2 (May 26, 2017), attached as Exhibit A to Sorenson Comments.

[37] *Id.* at 3-4.

[38] Notably, even without the additional complications of VRS, interpreting in both directions is enormously challenging. Recent studies have shown that ASL-English interpreters, on average, are not linguistically fluent in ASL. *See generally* M. M. Taylor, *Interpretation Skills: English to American Sign Language* (2nd ed. 2017).

interpreters to adapt quickly to different signers, novel (and often very personal) content, and unknown relationships between callers. Further, as Sorenson already explained, evaluating the accuracy of VRS interpretation is complicated by the fact that none of the standard national or regional English-ASL tests—including those of the Registry of Interpreters for the Deaf ("RID"), the Association of Visual Language Interpreters of Canada ("AVLIC"), the Texas Health and Human Services' Board for Evaluation of Interpreters ("BEI"), and the Educational Interpreter Performance Assessment ("EIPA")—assess specifically for VRS interpretation skills.

Among the leading researchers in this area is Dr. Marty Taylor, who has published several important works studying ASL-English interpreting. Sorenson submits herewith a report by Dr. Taylor further detailing the complexity of assessing quality and accuracy of VRS interpretations, including specific responses to the questions posed in the *NOI*.[39]

Finally, Sorenson notes that there is a difference between attempting to measure the quality and accuracy of an individual interpreter—which, as Dr. Taylor sets forth, is exceedingly complex—and the even more daunting task of measuring the quality of each providers' VRS. While developing methods to gather data assessing the quality of individual interpreters is an important step, the Commission would separately need to develop methods to weigh that data—along with other metrics such as video quality and speed of answer—to assess the overall performance and quality of each VRS provider.

Given the scale of such a project, and in light of the fact that VRS consumers can choose VRS providers based on their view of a provider's quality, Sorenson encourages the Commission to carefully consider whether and under what circumstances there may be a need for data collection to ensure that VRS users are receiving quality service. As a result of competition,

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[39] *See generally* Taylor Report.

VRS providers have steadily improved the quality of their hardware, software, and customer service to continue to attract customers. The Commission should consider whether additional regulation through data collection would be a net benefit (i.e., whether the benefits will outweigh the costs)—since consumers currently drive service improvements in the VRS marketplace by selecting the providers they prefer (either as a default provider or, call-by-call, through dial-around), and any compliance costs would be borne by the TRS Fund. In adopting any performance measures, the Commission should consider the extent to which the information will assist users in choosing among providers, balanced against the costs imposed by such a data collection.

V. THE COMMISSION SHOULD PROHIBIT NON-SERVICE RELATED INDUCEMENTS.

The comments reflect nearly unanimous support for banning non-service related inducements.[40] Nevertheless, the Commission should also continue to permit providers to provide service-related equipment such as videophones, TV monitors, speakers, and routers that are necessary in order use VRS. As ZVRS explained in its comments, "The Commission should . . . be careful not to discourage innovative VRS provider offerings or products that are intended to enhance the quality or accessibility of relay services for Deaf, DeafBlind, and Hard of Hearing consumers."[41] This is particularly true of no-charge equipment distribution. As Sorenson explained in its opening comments, if the Commission prohibited providers from providing

[40] *See* GlobalVRS Comments at 12-13; ZVRS Comments at 2-6; Convo Comments at 16.

[41] ZVRS Comments at 5.

equipment without cost, most deaf consumers would not be able to afford to use VRS because the necessary equipment costs between $650 and $1,000.[42]

Contrary to Convo's comments,[43] no-charge distribution of equipment necessary to utilize VRS does not distort the market; it permits the market to survive. Without no-charge access to equipment, many users would not be able to afford to use VRS; requiring all users to purchase a laptop, tablet or smartphone on which to install software-based videophones would impose a reverse-means test—only those with the means would be able to access VRS. That cannot be what the ADA intended. Nor does access to free software provide the same level of service quality; the picture quality using Sorenson's nTouch VP2, which was specifically designed for deaf users, can be much higher than the picture quality on a cell phone or tablet running provider-distributed software. Forcing users to rely on software would be a major step backward for functional equivalence and is not consistent with the Americans with Disabilities Act.

In addition, as ZVRS correctly notes,[44] if the Commission adopts a rule prohibiting inducements for a subscriber to choose a default provider, the Commission should create a *de minimis* exception for non-service related items of little value. There is no evidence in the record that small marketing items such as a provider-branded pen, note pad, ball cap or T-shirt would cause consumers to place more TRS calls or to otherwise increase the costs to the interstate TRS Fund. Similarly, the Commission should also be clear that charitable donations to entities that

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42 *See* Sorenson Comments at 33.

43 Convo Comments at 16.

44 *See* ZVRS Comments at 2.

may also use VRS, and random prize drawings are not be included.[45] It should be clear that the rule does not reach anything of value provided for reasons unrelated to becoming a default user, as that could impinge upon the deaf user's ability to carry out their livelihood, if they interact with VRS providers for other reasons.

In its comments, ZVRS makes the vague claim—without any evidence or specificity—that Sorenson uses non-service related inducements to attract and retain customers.[46] But as Sorenson explained in its opening comments, this is not true: the only equipment Sorenson distributes are videophones, routers, cables, and TV monitors—all of which are necessary for the provision of quality VRS. The Commission should disregard ZVRS's vague and unsubstantiated allegation to the contrary.

Regardless of what policy the Commission adopts, the Commission should adopt a clear rule that applies equally to all providers. If the Commission bans non-service related inducements, it should clarify what that means. For example, Sorenson has not in recent years distributed iPads to users who use the software version of its endpoint out of uncertainty over whether the Commission would construe this as a non-service related inducement. Sorenson has continued to receive reports, however, that companies such as ZVRS have continued to do so, putting Sorenson at a competitive disadvantage. To maintain a level playing field, the Commission should therefore clarify what counts as a non-service related inducement and should enforce that policy uniformly.

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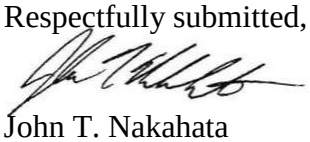
[45] *See Schools and Libraries Universal Service Support Mechanism; A National Broadband Plan for Our Future*, DA 10-2355, 25 FCC Rcd. 17,324, 17,327 ¶ 10 (discussing charitable contributions under the E-rate gift rule), 17,329 ¶ 13 n.32 (discussing random drawings) (2010).

[46] *See* ZVRS Comments at 3.

CONCLUSION

The Commission should (1) not restrict the use of reasonable noncompete clauses in VRS VI contracts; (2) confirm that providers may block callers who repeatedly harass interpreters and should confirm that interpreters are not government-appointed censors; (3) weigh the benefits of embarking on a challenging measurement program against the difficulties of doing so, and if it does so embark, have an independent third party conduct any performance measurements and make the results available to users; (4) ensure that functionally equivalent communications services are available to the extent possible to deaf and hard-of-hearing individuals; and (5) refrain from taking any steps that prevent providers from continuing to offer service-related equipment for free, exempt items of *de minimis* value form any restrictions on non-service related inducements, and ensure it has a clear policy on what kinds of items are improper for providers to offer callers.

Respectfully submitted,



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Counsel for Sorenson Communications, LLC

June 26, 2017

Exhibit A

Report provided to Chris Wakeland at Sorenson Communications, Inc.

In Response to FCC Questions on Metrics for VRS Interpreting, NOI, Dated March 23, 2017

Marty M. Taylor, PhD
June 16, 2017

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Introduction

My name is Dr. Marty Taylor. I have been an ASL-English interpreter and interpreter educator for over 30 years. I hold national certification granted by the Registry of Interpreters for the Deaf (RID) in the United States and by the Association of Visual Language Interpreters of Canada.

Pertinent to this report, my areas of expertise are research related to VRS interpreters (2005, 2009, 2010) and in measurement and assessment of interpreters. I have published two textbooks dealing with ASL-English interpreting: *Interpretation Skills: English to American Sign Language* (1993, 1st ed.; 2017, 2nd ed.) and *Interpretation Skills: American Sign Language to English* (2002) focusing on the necessary skills (and possible errors) that occur in interpretation work. These two books are used in over 100 interpreting programs across the US and Canada.

I am an independent academic, a neutral party without ties to the US TRS Industry, FCC, or any VRS provider. Sorenson Communications Inc. contracted my services to provide this report as an unbiased expert in the field of interpreting, education, research, assessment and VRS interpreting.

THIS DOCUMENT IS REFERRING TO THE QUESTIONS PRESENTED IN *THE STRUCTURE AND PRACTICES OF THE VIDEO RELAY SERVICE PROGRAM*, CG DOCKET NO. 10-51; *TELECOMMUNICATIONS RELAY SERVICES AND SPEECH-TO-SPEECH SERVICES FOR INDIVIDUALS WITH HEARING AND SPEECH DISABILITIES*, CG DOCKET NO. 03-123, NOTICE OF INQUIRY, FURTHER NOTICE OF PROPOSED RULEMAKING, AND ORDER, DATED MARCH 23, 2017, FCC 17-26.

Adopted: March 23, 2017

Executive Summary

Measuring and assessing quality and accuracy of VRS interpretations are multi-layered and highly complex. Engaging neutral third party experts approved by FCC and the vendors is a viable solution to identifying and describing necessary skills and outcomes required for VIs. Valid and reliable assessments must occur in real call situations, not in a sterile, controlled environment.

No national or regional exam exists for assessing the effectiveness of VRS interpretations, other than what individual vendors may employ. Skills related specifically to VRS include 1) metacognitive skills, 2) language skills, 3) team strategies, 4) call management, 5) customer service, and 6) telephone protocol (Taylor, 2009).

Meaning and fidelity of the callers' message, not word-for-word interpretations require the use of processing time. The goal of having an accurate message is more important than the speed in which it occurs. The instant the interpreter sees or hears the caller, the interpretation has begun. Research shows (Cokely, 1985) that the greater the processing time, the less errors and the more accurate the target language. Simultaneous interpretation has become the default mode of VRS interpreting (perhaps as a carry over from TRS and its use of "verbatim" communication), rather than using the time necessary, perhaps in a consecutive mode, to relay the most accurate and complete interpretation within the VRS context.

Separating measurements of caller satisfaction and VI interpreting quality and accuracy is critical. Questions that need to be answered in relation to assessing quality and accuracy of interpretation in the VRS setting must be addressed by the FCC, the industry, and the customers of VRS through a neutral third party are:

1) What are the purpose(s) and the specific questions related to quality and accuracy in the VRS setting that need to be answered?
2) What specific quality and accuracy measurement results in the VRS setting are useful for each group of stakeholders?
3) How will the results be reported and shared?

Performance Measures

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We seek comment on whether the derivation of data used to measure VRS service quality should be overseen by the TRS Fund administrator or otherwise developed through contractual or similar arrangements with independent third parties selected by the Commission

Third party experts required for consistent measurements

Performance measures of VRS interpreters must be provided by experts who are trained to assess interpretations in a holistic manner to address the various levels of complex components that occur during relayed calls. These experts must have a deep knowledge of interpreted telephone relay and of the nuances necessary to provide effective interpretations between the callers that capture fidelity of the messages and functional equivalency.

The experts who design performance measures must be an independent and neutral third party approved by the vendors, creating a pool of individuals and/or companies with whom the vendors can work.

This pool of experts must be trained so that they are using the same criteria when assessing relayed calls across providers. The criteria for experts to provide assessments include, but are not limited to the following:

1. Neutral experts who are not employees of any one provider.
2. Experts who know the depth of skills, knowledge, and personal attributes required to interpret VRS calls effectively.
3. Experts who are agreed upon by both the providers and the TRS Fund administrator garnering input, but work independently from both.
4. Experts who are certified ASL-English interpreters with extensive experience of designing assessments of ASL-English interpreters, specifically in the VRS setting.
5. Experts who are capable of providing consistent and reliable assessments.

With the above stated, it is important to note that callers can not provide these performance measures because they do not have access to both sides of the conversation. Callers are limited to only one part of the conversation with the other part of the conversation being inaccessible to them. Therefore, callers can comment on their degree of satisfaction with the interpretation from a very limited perspective. At times, interpretations can appear to be flawless, yet they are inaccurate. Other times, interpreters might interrupt the caller to ask for

clarification which may appear to the caller as less than desirable, not being aware that this is a common practice when two people are communicating, especially when talking on the telephone.

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To measure functional equivalence, we seek specific comment on whether to use the following metrics: (1) quality and accuracy of interpretation; (2) technical voice and video quality 3) interoperability and portability; (4) percentage and frequency of dropped or disconnected calls; and (5) service outages

Assessing and measuring quality and accuracy

Assessing (1) quality and accuracy of interpretations, is appropriate for measuring functional equivalency, if these assessments and measurements are provided by agreed upon (by providers and the FCC) ASL-English experts trained to provide consistent assessments across providers.

When assessing "quality and accuracy of interpretation", it must be in the context of relayed calls. Relayed calls are significantly different from a non-relayed call.

Quality and Accuracy of Interpretation

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We seek comment on how interpretation quality can be effectively measured to assess functional equivalence

Traditional measurements and measuring VRS Functional Equivalence

Measuring functional equivalency as it pertains to VRS interpretations is extremely complex. As is shown in the following chart, traditional interpreting and VRS interpreting are very different from one another (Distance Opportunities for Interpreter Training Center, 2005; Taylor, 2009).

TRADITIONAL INTERPRETING	VRS INTERPRETING
Face-to-face communication	No in-person contact

TRADITIONAL INTERPRETING	VRS INTERPRETING
Three-dimensional perspective	Two-dimensional perspective dependent on high speed compression with times when the quality decays
No physical limitation on signing space	Restricted signing space due to technology
Uses contextual and environmental cues for making meaning	Contextual/environment to support cues are lacking
Relationship between parties is commonly known (e.g. doctor/patient, employer/employee)	Relationships between callers are often unknown
Sociolinguistic factors (gender, age, ethnicity) are overt	Sociolinguistic factors are not always known
Assignments are made in advance	"Immediate" assignments
Ability to accept or turn down assignments (e.g., legal or medical interpreting)	Must accept all calls regardless of content or caller (e.g., young children, new immigrant with limited signing abilities, computer techie)
Potential for extensive preparation	Relies on prior experiences rather than preparation
Generally works alone or with one other interpreter	Team environment
Often self-employed	Works for a corporation
Interpretation is the only role	Multiple roles occurring simultaneously (e.g., operator, customer service representative)
One locale with a relatively limited and predictable number of deaf and hard of hearing consumers (e.g., number of "jobs" in a day often range from one to five)	Wide variety of callers and content (e.g., number of calls in a day can be over 100)
Often regional signs are known	Often regional signs are not known
Consumers see each other and are able to monitor reactions visually and auditorily	Callers are not able to see or hear each other or monitor reactions.
No special need for technology competence	Technology competence is a necessary skill
Dual-tasking at linguistic and physical levels	Multi-tasking at linguistic, physical and mechanical levels
Generally greater demand for English to ASL interpreting	Greater demand for ASL to English interpretation
Most consumers are experienced using interpreters	Many inexperienced callers placing phone calls
Very little use of intimate register	High number of calls requiring the use of intimate register

Interpretation quality and accuracy must be measured within the context of relayed calls, in addition to traditional assessment measures. Research has identified and

categorized the essential competencies for VRS interpreters providing a foundation on which to consider creating measurements for functional equivalency (Taylor, 2009). These competencies fall into three main categories: skills, knowledge, and personal attributes. The six sub-skills are described below.

VI skills specific to VRS:

1. Metacognitive skills include the ability to talk about and analyze one's own interpretation as it relates to VRS work.
2. Language fluency in ASL and in English is crucial for effective interpretation work. The sophisticated mastery of these languages is the underpinning of all that VRS interpreters must possess.
3. Teaming strategies in the VRS setting is a necessary skill that affects the entire VRS center. Interpreters must possess the ability to demonstrate specific techniques for teaming in the VRS setting.
4. Call management requires interpreters to manage the calls beginning with answering the phone, placing and connecting the call, relaying the conversation, and completing the call. VIs must handle the call, while at the same time allowing callers to control the call as they wish.
5. Customer service must be demonstrated by all VIs and is important to the callers, the company and ultimately the FCC.
6. Telephone protocol is part of a highly sophisticated learned culture, a telephone culture of protocol and etiquette. This sophisticated culture is driven by specific expectations and goals that affect the messages conveyed from caller to caller on each and every call.

Taylor (1993, 2002, 2017) states that ASL-English interpreters, on average, are not linguistically fluent in ASL. This fact continues to hamper the effectiveness of interpretations in all settings. Taylor (2002, 2017) has identified 85 specific skills that are required to interpret from English to ASL, and 49 key skills required for interpreting from ASL to English. These key skills do not include all the skills necessary to provide functional equivalence for interpreted calls, such as call management, customer service, telephone protocol, and tolerance of changes in technology which are all additional key skills necessary to provide functional equivalence in relayed calls.

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How should accuracy be measured?

Measuring accuracy, quality, and meaning

Before "accuracy" can be measured, it must be clearly described. "Accuracy" of interpretations for VRS is much more than whether or not the signed message and

the spoken English message are equivalent on the surface. For example, in English there are subtle differences that exist between the words "home" and "house". A non-native speaker may use these terms interchangeably which could be considered "accurate," but their precise meanings are very different from one another and therefore if "home" and "house" are used in the wrong context, then their use is inaccurate, wrong, not correct. In some conversations these differences can be significant and cause misunderstandings between the callers engaged in conversation.

The selection of the "accurate" interpretation depends on the context in which the conversation occurs during the telephone call; is the conversation between a real estate agent and a potential buyer or between family members planning to be together for the holidays? The use of not only "home" and "house" but the entire interpretation will be affected by every decision the interpreter makes while interpreting the phone call. One decision will affect the next, and then the next, and so on.

"Meaning" is a vital aspect of "accuracy". Many ways are used to describe meaning, such as the overt and covert meanings of utterances. Faithfulness or fidelity is another consideration and includes completeness as well as accuracy (Moody, 2011).

Nicodemus and Emmorey (2015) assessed accuracy and quality in ASL-English interpretations. In their research, accuracy was rated on semantic content and articulation quality was rated on flow, speed and prosody. Semantic content included rating omissions, skewing, and semantic equivalence. The prosody component of articulation quality was further delineated and was rated for intonation, pitch and volume in English; and in ASL velocity, eye blinks, head nods and body movement were rated.

Interpretation accuracy and quality are extremely difficult to assess because the process is not static as would be a written translation. Interpretation by definition is moving from one language to another language with ease, precision, timing, and following the cultural norms associated with Deaf, Deaf-blind, and hard of hearing callers as well as the hearing callers. Each and every event is unique, never to occur again, and must be handled with the greatest sophistication of language fluency and fidelity of the interpreted messages so that no meaning is added or deleted, exaggerated or softened in any manner whatsoever.

69

What metrics and methods are currently used to evaluate VRS interpreters, e.g., for purposes of certification or evaluation during interpreter training?

<u>No national metrics for evaluating VRS interpreters</u>

None of the standard national or regional English-ASL tests such as the Registry of Interpreters for the Deaf (RID), the Association of Visual Language Interpreters of Canada (AVLIC), the BEI offered by Texas Health and Human Services, the

Educational Interpreter Performance Assessment (EIPA) assess specifically for VRS interpreters. All of these interpreting tests are testing for global, general skills interpreting for in-person communication. One exception is that the EIPA specifically assesses interpretation in the context of education, but still for in-person communication.

Without any such metric or method currently available, skills such as managing turn taking, managing phone trees, managing conversations where the callers do not see or hear each other, creating metrics and methods for evaluating VRS interpreters is extremely complex. For example, when the callers cannot see each other, how well does the interpreter describe something like the parts of a drain, plumbing techniques, or the city's underground sewage system. When people are able to see one another, these descriptions are easier to show, describe, and explain because people are using gestures along with pictures, graphs and maps to illustrate the meaning of the message being conveyed. Although there are similarities in interpreting in person with the people physically present in one location, telephone interpreting is different from any other type of interpreting and therefore requires different metrics and methods.

69

Are there relevant metrics and methods used by spoken language translators that could be effectively applied to evaluate the accuracy of VRS interpretation?

Spoken language metrics

Research has been conducted on spoken language translators that relates to the question asked here. One example, Tzou et al (2012) following Christoffels et al. (2003) research had two experienced simultaneous interpreters, experts, assess recorded interpretations from English into Mandarin using two measures to assess the interpretation of 10 sentences/segments. One measure was a 0-3 point scale of whether or not the English was translated in its entirety into Mandarin. The second measure was on the overall quality of the interpretation using a 0-5 point scale looking at other factors such as tone of voice and confidence of the interpreter.

Measuring the number of different types of errors, (Barik, 1994), has been criticized for focusing too much on specific words or the exact form of the interpretation, rather than on the message equivalency. Also, experts' perspective on errors may not agree with what the interpreters mark as errors (see Gile, 1991).

69

For example, for any given call, can accuracy be measured by comparing the signs of the ASL user and words of the hearing person—as each are delivered to the CA—to the words spoken and signs made by the CA?

Measuring signs and words feasible?

The short answer to this question is "no"; accuracy can not be measured by comparing the signs of the ASL user and the words of the hearing person—as each are delivered to the VI—to the words spoken and signs made by the VI. As stated earlier, interpretation, by definition, requires that all levels of meaning conveyed by each caller must be interpreted as it was meant. The overall communication between the callers, the content, and the purpose of the call, must be considered.

Taylor (2017) discusses four levels of meaning, starting with the most basic:

1) Content meaning can be referred to as the surface meaning: what is said, what is the response, and so on.
2) Functional meaning is a deeper level of meaning that includes the content, AND the purpose of the interaction.
3) Textual meaning is the relationship of the current utterance to the rest of the communication content and the overall communication event.
4) Social meaning, the deepest level of meaning, is the relationship being formed or deepened during the communication event.

All of these levels of meaning must be included in the interpretation and therefore looking at individual signs for words, and words for signs is inappropriate and will not yield the desired metric outcomes.

Decisions interpreters make during the interpretation are made within the context of the entire conversation and are made immediately and consecutively as they interpret each message that the callers convey. These decisions change and become more precise as the conversation continues between callers and the interpreter has more information and more context with which to make interpretation decisions.

69

Given that interpretation of ASL to English is often a matter of conveying concepts rather than word-for-word translation, how can an appropriate comparison between the signs produced by ASL users be effectively compared to the words relayed by the CA to produce an effective accuracy percentage?

Conveying concepts, not word-for-word

Both ASL to English *and* English to ASL interpretations convey concepts, not word-for-word translations. If word-for-word translations were provided, this would be inaccurate and incomprehensible to both parties on the phone call.

69

How can we account for such differences in taking accuracy measurements? Are there scales similar to the voice five-step mean opinion score (MOS) metrics? MOS scores are used to rate the user-perceived quality and listening effort on a five point scale, such as "excellent-good-fair-poor-bad," as defined in ITU-T Recommendation P.800

MOS and ITU-T Recommendation, p. 800

Callers themselves would be the best resource to provide answers to this question. Mean opinion score (MOS) metrics are typically done in a controlled lab environment. As a result of this environment on which MOS metrics are taken, the results do not replicate real VRS calls. Callers can comment on satisfaction of the VRS calls. However, numerous satisfaction data points exist (speed of answer, friendliness of VI, technical ability to adjust their video and audio feeds and ask the callers to adjust theirs as well, visibility and audibility of the interaction relayed, etc.). Callers cannot comment on accuracy due to the fact that they don't have access to both sides of the conversation.

Considerations:

1) Create more sophisticated opportunities for callers to develop a variety of satisfactory rating systems that meet their needs and result in providing the industry with reliable and valid data.
2) Ask the VRS providers to partner with Deaf, hard of hearing and deaf-blind individuals to create and pilot different rating options.

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Should we adjust accuracy measurements for certain kinds of calls, such as calls to 911 or calls where a skills-based or deaf interpreter is utilized?

Measuring accuracy for unique calls

It is premature to address accuracy measurements for certain kinds of calls because the measurements are not yet determined for regular calls. Prior to making this decision on unique calls, trials should be conducted on skill-based routing and the use of Certified Deaf interpreters (CDIs). These trials should then be reported, evaluated and time allowed to make revisions as necessary before any accuracy measurements are conducted on specific types of calls.

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What tools should we use to measure the accuracy of VRS calls given that measurements may be unreliable without access to both sides of the conversation?

Measuring accuracy without access to both sides of the conversation

Measuring accuracy of interpretations "requires" access to both sides of the conversation. Measuring the interpretation of one side of the conversation would result in unreliable and invalid results.

In addition to callers not having access to the information provided on the other end of the call, they also don't have access to the quality of the connection. For example, is static present on either side of the call; is the signer visible to the interpreter; is background noise present or is the caller's signal going on and off while traveling; does the caller have an accent that is difficult to understand, and so on.

Considerations

1) Explore ways in which to record calls that either are real calls or real simulated calls that could then be submitted to an approved evaluation team mutually acceptable to FCC and VRS companies (e.g., secret shopper identified by providers and/or the FCC).
2) Identify a variety of specific elements of interpretations that could be used to assess VIs' accuracy (e.g., effective call management and effective message clarification strategies).
3) Train approved evaluation team members who are mutually acceptable to FCC and VRS companies to provide well-defined, consistent and unbiased VI assessments of interpreted calls.

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We also seek comment on whether and how to measure the synchronicity of interpreted communications taking place during a VRS call. Although we recognize that there is necessarily some delay during relay calls, this delay should be kept to a minimum, and signing should begin to appear at the approximate time that the corresponding speech begins and end approximately when the speech ends.
**** We seek comment on whether there are existing metrics, e.g., for non-ASL language interpreters, that we might use for this purpose.**

Synchronicity and required cognitive processing time during calls.

The current trend in the VRS industry is to work simultaneously when interpreting from and into American Sign Language (see Taylor, 2005, 2009). This is possible due to the different modality, visual and auditory, languages that are used. When both languages are spoken languages, then consecutive rather than simultaneous interpreting would be the norm because of the overlapping auditory verbiage. Due to a lack of direction from the TRS industry, including the misnomer of "verbatim",

VRS interpreting work has tended to follow suit and therefore, up until now, has been for the most part simultaneous.

Cokely (1985) states when measuring the processing time (i.e., synchronicity) required for expert interpreters to render an interpretation, the average "ranged from 1.70 to 4.80 seconds". Cokely goes on to state that the longer the processing time, the fewer the errors. "Those interpreters with longer lag times not only produced the fewest miscues but also had the highest percentage of acceptable target language utterances." Of particular note, this study was done with highly experienced, nationally certified interpreters who were interpreting a one-way communication event, not a two-way phone call which by nature of the interaction requires more processing time to produce accurate and effective interpretations.

Cokely measured the accuracy of interpretations using the following error categories:

1) omissions,
2) additions,
3) substitutions,
4) intrusions, and
5) anomalies.

Each of these categories was further sub-divided. The taxonomy of miscues was then used to provide evidence for the major stages in the process of interpretation. Major stages in the process include:

1) preliminary processing,
2) short term message retention,
3) semantic intent realization,
4) and semantic equivalence determination (Cokely, 1985).

The goal of having an accurate message is more important than the speed in which it occurs. The instant the interpreter sees or hears the caller, the interpretation has begun. Decision-making must occur immediately as to how the interpreter will represent this individual's message? What is the context? What is the content? Who is she calling? What is the purpose of the call? Are they talking about a man or a woman? A person or an animal? All of these questions must be managed in order to produce an accurate interpretation. Not surprising, this cognitive processing requires time to go through the required cognitive processes of 1) preliminary processing, 2) short term memory, 3) semantic intent realization (i.e., understanding the meaning of the utterances) and 4) semantic intent realization, thus producing the message in the other language. The time required to move through this sequence of skills is necessary to provide functional equivalency.

Considerations:

1) Define the term synchronicity in terms of simultaneous interpretation, and not word for word translation or transliteration.
2) Encourage and support the use of processing time when relaying calls.

3) Adapt consecutive interpreting when the caller, the content, or the technology requires consecutive interpreting to provide functional equivalence.

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Are there other metrics that the Commission should use to evaluate interpreter quality and accuracy? How effectively will such metrics assess the extent to which functional equivalence is being attained, and what methods can be used to measure these?

Quality and accuracy metrics related to functional equivalency

Interpretation quality and accuracy are paramount for providing functional equivalency in placing phone calls using interpreters. Prior to creating measures and assessments the following need to be addressed and shared with the stakeholders.

Considerations are to define and describe the following.

1) What is the purpose(s) of the quality and accuracy measures in the VRS setting?
2) What are the specific questions related to quality and accuracy that need to be answered in the VRS setting?
3) What specific quality and quantity measures are useful in the VRS setting?
4) How will each measure be used in the VRS setting?
5) How will each measure be shared with others?
6) Who will have access to the results of each measurement?
7) How do all of the above decisions affect the current environment under which the VRS industry operates?

References

Barik, H. C. (1994). A description of the various types of omissions, additions and errors of translation encountered in simultaneous interpretation. In Lambert & Moser-Mercer (eds.), pp. 121–137.

Christoffels, I. K., de Groot, A. M. B. & Waldorp, L. J. (2003). Basic skills in a complex task: A graphical model relating memory and lexical retrieval to simultaneous interpreting. *Bilingualism: Language and Cognition* 6 (3), 201–211.

Cokely, D. R. (1985). *Towards A Sociolinguistic Model Of The Interpreting Process: Focus On Asl And English (interpreting, Sign Language)* (Order No. 8602362). Available from ProQuest Dissertations & Theses Global. (303335950). Retrieved from http://login.ezproxy.library.ualberta.ca/login?url=http://search.proquest.com/docview/303335950?accountid=14474

Distance Opportunities for Interpreter Training Center. (Sept. 2005). *Video Relay Services Interpreting Task Analysis Report.* University of Northern Colorado.

Gile, D. (1991). Methodological aspects of interpretation (and translation) research. *Target*, 3, 153–174.

Moody, B. (2011). What is a faithful interpretation? *Journal of Interpretation 21*(1), 37-51.

Nicodemus, B., & Emmorey, K. (2015). Directionality in ASL-English interpreting: Accuracy and articulation quality in L1 and L2. *Interpreting, 17*(2), 145-166. Retrieved from http://login.ezproxy.library.ualberta.ca/login?url=http://search.proquest.com/docview/1738471331?accountid=14474

Taylor, M. M. (1993). *Interpretation Skills: English to American Sign Language*. (1st Ed.). Interpreting Consolidated. Edmonton, Canada.

Taylor, M. M. (2002). *Interpretation Skills: American Sign Language to English*. Interpreting Consolidated. Edmonton, Canada.

Taylor, M. M. (2005). *Video Relay Services: Interpreting Task Analysis Research*

Report. Distance Opportunities for Interpreter Training Center, Denver, Colorado. 32 pages.

Taylor, M. M. (2009). *Video Relay Services Industry Research: New Demands on Interpreters*. Interpreting Consolidated. Edmonton, Canada.

Taylor, M. M. (2010). *VRS Implications: New Demands on Interpreters*. Invited presenter to the National Symposium on Video Interpreting: The State of the Practice and Implications. Washington, D.C.

Taylor, M. M. (2017). *Interpretation Skills: English to American Sign Language*. (2nd Ed.). Interpreting Consolidated. Edmonton, Canada.

Tzou, Y., Eslami, Z. R., Chen, H., & Vaid, J. (2012). Effect of language proficiency and degree of formal training in simultaneous interpreting on working memory and interpreting performance: Evidence from Mandarin-English speakers. *The International Journal of Bilingualism, 16*(2), 213-227. Retrieved from http://login.ezproxy.library.ualberta.ca/login?url=http://search.proquest.com/docview/1022485131?accountid=14474